



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/687,418 10/16/2003 William E. Welnick 33692.03.3199 7981

23418 7590 08/30/2006

VEDDER PRICE KAUFMAN & KAMMHOLZ
222 N. LASALLE STREET
CHICAGO, IL 60601

EXAMINER

MILLER, BRANDON J

ART UNIT PAPER NUMBER

2617

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Art Unit: 2617

DETAILED ACTION

Response to Amendments

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6, 8-11, 13-14, 16-17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutton (5,644,591) in view of Jou et al. (US 2003/0119505 A1).

Regarding claim 1 Sutton teaches a circuit for producing a pilot strength measurement comprising: receiving long term filtered measurement data corresponding to at least one pilot signal, and in response, operative to produce the pilot measurement including at least the received long term filtered measurement data (see abstract and col. 2, lines 27-32). Sutton teaches receiving short term filtered measurement data corresponding to at least one pilot signal, and wherein the pilot strength measurement further includes at least the short term filtered measurement data if a pilot signal represented by corresponding long term filtered measurement data is less than a threshold (see col. 2, lines 28-40, small window set relates to short term measurement data and large window set relates to long term measurement data). Sutton does not specifically teach producing a pilot strength measurement message and a pilot strength measurement message generator. Jou teaches a pilot strength measurement message and a pilot strength measurement message generator (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to

Art Unit: 2617

include a pilot strength measurement message generator because a pilot strength measurement can be transmitted in the form of a message and it would allow for an improved method for pilot channel acquisition.

Regarding claim 3 Sutton and Jou teach a device as recited in claim 1 except for receiving short term filtered measurement data corresponding to the at least one pilot signal, and wherein the at least one pilot signal includes at least one of an active set of pilot signals, and a candidate set of pilot signals such that the pilot strength measurement message further includes at least the short term filtered measurement data based on at least one of a number of pilot signals in the active set, and a number of pilot signals in the candidate set. Sutton does teach receiving short term filtered measurement data corresponding to the at least one pilot signal, and wherein the at least one pilot signal includes at least one of an active set of pilot signals, such that the pilot strength measurement further includes at least the short term filtered measurement data based on at least one of a number of pilot signals in the active set (see col. 2, lines 33-36). Jou does teach a pilot strength measurement message generator (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving short term filtered measurement data corresponding to the at least one pilot signal, and wherein the at least one pilot signal includes at least one of an active set of pilot signals, and a candidate set of pilot signals such that the pilot strength measurement message further includes at least the short term filtered measurement data based on at least one of a number of pilot signals in the active set, and a number of pilot signals in the candidate set because it would allow for an improved method for pilot channel acquisition.

Art Unit: 2617

Regarding claim 4 Sutton and Jou teach a device as recited in claim 1 except for receiving short term filtered measurement data corresponding to the at least one pilot signal, and wherein the pilot strength measurement message includes at least the long term filtered measurement data if a strongest pilot signal represented by corresponding long term filtered measurement data is greater than a threshold. Sutton does teach receiving short term filtered measurement data corresponding to the at least one pilot signal, and wherein the pilot strength measurement includes at least the long term filtered measurement data if a pilot signal represented by corresponding long term filtered measurement data is greater than a threshold (see abstract and col. 2, lines 28-40). Jou does teach a pilot strength measurement message generator (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving short term filtered measurement data corresponding to the at least one pilot signal, and wherein the pilot strength measurement message includes at least the long term filtered measurement data if a strongest pilot signal represented by corresponding long term filtered measurement data is greater than a threshold because it would allow for an improved method for pilot channel acquisition.

Regarding claim 5 Sutton and Jou teach a device as recited in claim 4 except for a threshold that includes a drop threshold plus 3dB. Jou does teach a drop threshold (see paragraph [0013]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a threshold that includes a drop threshold plus 3dB because this would allow for an improved method for acquiring a pilot channel.

Art Unit: 2617

Regarding claim 6 Sutton teaches a wireless device for producing a pilot strength measurement, comprising a first receiver operative to receive at least one pilot signal, and in response, operative to generate long term measurement data corresponding to the at least one pilot signal (see abstract and col. 2, lines 27-31). Sutton teaches a second receiver operative to also receive the at least one pilot signal, and in response operative to generate short term filtered measurement data corresponding to the at least one pilot signal (see col. 2, lines 34-36). Sutton teaches a first receiver and a second receiver operative to produce the pilot strength measurement including the long term filtered measurement data received from the receiver (see abstract, col. 2, lines 30-38). Sutton teaches using short term filtered measurement data if a pilot signal represented by corresponding long term filtered measurement data is less than a threshold (see col. 2, lines 28-40, small window set relates to short term measurement data and large window set relates to long term measurement data). Storm does not specifically teach a pilot strength measurement message and a pilot strength measurement message generator. Jou teaches a pilot strength measurement message and receivers coupled to a pilot strength measurement message generator (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a pilot strength measurement message generator because a pilot strength measurement can be transmitted in the form of a message and it would allow for an improved method for pilot channel acquisition.

Regarding claim 8 Sutton and Jou teach a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 9 Sutton and Jou teach a device as recited in claim 6 except for wherein the pilot strength measurement message includes at least the long term filtered measurement data

Art Unit: 2617

if the strongest pilot signal represented by corresponding long term filtered measurement data is greater than a threshold. Sutton does teach long term filtered measurement data if a pilot signal represented by corresponding long term filtered data exceeds a threshold (see col. 2, lines 28-40, large window set relates to long term measurement data). Jou does teach a pilot strength measurement message (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the pilot strength measurement message includes at least the long term filtered measurement data if the strongest pilot signal represented by corresponding long term filtered measurement data is greater than a threshold because it would allow for an improved method for pilot channel acquisition.

Regarding claim 10 Sutton and Jou teach a device as recited in claim 5 and is rejected given the same reasoning as above.

Regarding claim 11 Sutton teaches a wireless device for producing a pilot strength measurement comprising; generating corresponding long term filtered measurement data (see abstract and col. 2, lines 28-32). Sutton teaches generating corresponding short term filtered measurement data (see abstract and col. 2, lines 33-39, small window set relates to short term filtered data). Storm teaches at least the long term filtered measurement data if a pilot signal represented by corresponding long term filtered measurement data generated by at least one of the plurality of finger receivers is greater than a threshold (see abstract, col. 2, lines 29-39). Sutton teaches the pilot strength measurement includes at least the long term filtered measurement data if the pilot signal represented by the long term filtered measurement data exceeds threshold values (see col. 2, lines 28-39, large window set relates to long term data).

Art Unit: 2617

Sutton teaches the pilot strength measurement includes at least the short term filtered measurement data according to a threshold (see col. 2, lines 33-36). Sutton does not specifically teach a plurality of finger receivers each operative to receive at least one of an active pilot signal and a candidate pilot signal, a scan search receiver also operative to receive at least one of an active pilot signal candidate pilot signal, pilot strength measurement message and a pilot strength measurement message generator; and including long term filter measurement data if at least one of a number of candidate pilots is greater than three, and a number of active pilots greater than one. Sutton does teach receivers operative to receive a pilot signal (see abstract and FIG. 1) a scan search receiver (see col. 6, lines 1-4). Jou does teach a number of candidate pilots and a number of active pilots (see paragraph [0012]). Jou does teach a pilot strength measurement message (see paragraph [0023]). Jou teaches a pilot strength measurement message and receivers coupled to a pilot strength measurement message generator (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a plurality of finger receivers each operative to receive at least one of an active pilot signal and a candidate pilot signal, a scan search receiver also operative to receive at least one of an active pilot signal candidate pilot signal, pilot strength measurement message and a pilot strength measurement message generator; and including long term filter measurement data if at least one of a number of candidate pilots is greater than three, and a number of active pilots greater than one because a pilot strength measurement can be transmitted in the form of a message and it would allow for an improved method for pilot channel acquisition.

Art Unit: 2617

Regarding claim 13 Sutton and Jou teach a device as recited in claim 5 and is rejected given the same reasoning as above.

Regarding claim 14 Sutton teaches a circuit for producing a pilot strength measurement comprising: receiving long term filtered measurement data corresponding to at least one of a plurality of pilot signals (see abstract and col. 2, lines 28-32), and short term measurement data corresponding to at least one of the plurality of pilot signals (see col. 2, lines 33-38). Sutton teaches producing the pilot strength measurement based on at least the long term filtered measurement data, in response to receiving the long term filtered measurement data corresponding to at least one of the plurality of pilot signals, and the short term filtered measurement data corresponding to at least one of the plurality of pilot signals (see abstract and col. 2, lines 29-39). Sutton teaches short term filtered measurement data if a pilot signal represented by corresponding long term filtered measurement data is less than a threshold (see col. 2, lines 28-40, small window set relates to short term measurement data and large window set relates to long term measurement data). Sutton does not specifically teach a pilot strength measurement message. Jou teaches a pilot strength measurement message (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a pilot strength measurement message because a pilot strength measurement can be transmitted in the form of a message and it would allow for an improved method for pilot channel acquisition.

Regarding claim 16 Sutton teaches receiving an active set of pilot signals, and producing the pilot strength measurement including at least the short term filtered measurement data, based on at least one of a number of pilot signals in the active set (see col. 2, lines 29-39). Sutton does

Art Unit: 2617

not specifically teach receiving a candidate set of pilot signals and a pilot strength measurement message. Jou teaches receiving an active set of pilot signals and a candidate set of pilot signals (see paragraph [0012]). Jou teaches a pilot strength measurement message (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving a candidate set of pilot signals and a pilot strength measurement message because it would allow for an improved method for pilot channel acquisition.

Regarding claim 17 Sutton teaches a method for producing a pilot strength measurement comprising: receiving a plurality of pilot signals and producing long term filtered measurement data corresponding to at least one of the plurality of pilot signals (see abstract and col. 2, lines 28-32). Sutton teaches producing short term filtered measurement data corresponding to at least one of the plurality of pilot signals (see abstract and col. 2, lines 2, lines 33-38, small window set relates to short term data). Sutton teaches producing pilot strength measurement including at least the long term filtered measurement data corresponding to at least one of the pilot signals, when a pilot signal represented by corresponding long term filtered measurement data is greater than a threshold (see abstract and col. 2, lines 29-39). Sutton teaches receiving an active set of pilot signals, and producing the pilot strength measurement including at least one of the long term filtered measurement data and the short term filtered measurement data, based on at least one of a number of pilot signals in the active set (see col. 2, lines 29-39, large window set relates to long term data). Sutton does not specifically teach a pilot strength measurement message and receiving a candidate set of pilot signals. Jou teaches receiving an active set of pilot signals and a candidate set of pilot signals and (see paragraph [0012]). Jou teaches a pilot strength

Art Unit: 2617

measurement message (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a pilot strength measurement message because a pilot strength measurement can be transmitted in the form of a message and it would allow for an improved method for pilot channel acquisition.

Regarding claim 19 Sutton teaches receiving an active set of pilot signals, and producing the pilot strength measurement including at least the long term filtered measurement data when a pilot signal represented by corresponding long term filtered measurement data is less than a first threshold and greater than the second threshold (see col. 2, lines 29-39). Sutton does not specifically teach a drop threshold, a number of candidate pilots that is greater than one, and a number of active pilots is greater than two, and a pilot strength measurement message. Jou teaches a drop threshold (see paragraph [0013]). Jou teaches a number of candidate pilots and a number of active pilots (see paragraph [0012]). Jou teaches a pilot strength measurement message (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a drop threshold, a number of candidate pilots that is greater than one, and a number of active pilots is greater than two, and a pilot strength measurement message because this would allow for an improved method for pilot channel acquisition.

Regarding claim 20 Sutton teaches a memory containing instructions executable by one or more processing devices that causes the one or more processing devices to operate (see col. 3, lines 54-57). Sutton teaches receiving long term filtered measurement data corresponding to at least one of a plurality of pilot signals (see abstract and col. 2, lines 28-31), and short term filtered measurement data corresponding to at least one of the plurality of pilot signals (see col.

Art Unit: 2617

2, lines 33-36). Sutton teaches producing the pilot strength measurement based on at least the long term filtered measurement data corresponding to at least one of the pilot signals when a pilot signal represented by corresponding long term filtered measurement data is greater than a threshold (see abstract and col. 2, lines 29-39). Sutton teaches using short term filtered measurement data if a pilot signal represented by corresponding long term filtered measurement data is less than a threshold (see col. 2, lines 28-40, small window set relates to short term measurement data and large window set relates to long term measurement data). Storm does not specifically teach a pilot strength measurement message. Jou teaches a pilot strength measurement message (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a pilot strength measurement message because a pilot strength measurement can be transmitted in the form of a message and it would allow for an improved method for pilot channel acquisition.

Response to Arguments

Applicant's arguments filed 6/23/2006 have been fully considered but they are not persuasive.

Regarding claims 1, 6, 11, 14, 17, and 20 the combination of Sutton and Jou teach a device as claimed. Sutton teaches including calculated energy values for a small window set if a pilot signal represented by a calculated energy value for a large window set is less than a threshold (see col. 2, lines 28-40). The inclusion of calculated values for the small window set according to a threshold (see col. 2, lines 31-36) relate to including short term measurement data if long term data is than a threshold because the calculated values are measured. The large window set relates to a pilot signal represented by long term filtered data because the phase of

Art Unit: 2617

the pilot channel is determined using the calculated values for the large window set (see col. 2, lines 28-31). Jou teaches a pilot strength measurement message and a pilot strength measurement message generator (see paragraph [0023]).

Regarding claims 3, 8, 16, 18, and 19 Sutton teaches using a small window set which is a subset of the large window set (see col. 2, lines 33-36, this relates to changing filter characteristics because the characteristics of the original large window set have been changed).

Regarding claims 3, 8, 16 and 18-19, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., signal strength measurement reported to a base station) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Willey U.S Patent No. 5,920,550 discloses a system, method, and apparatus for soft handoff.

Bruckert et al. U.S. Patent No. 5,987,012 discloses a method of handing off and a wireless communication device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

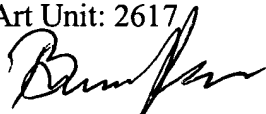
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

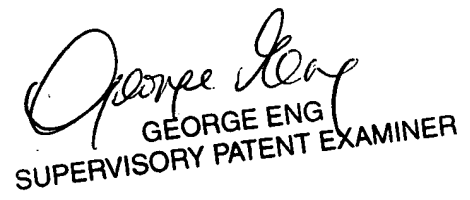
Application/Control Number: 10/687,418

Page 14

Art Unit: 2617

A handwritten signature in black ink, appearing to read "Bumfan".

August 25, 2006

A handwritten signature in black ink, appearing to read "George Eng". Below the signature, the text "GEORGE ENG" and "SUPERVISORY PATENT EXAMINER" is printed in a bold, sans-serif font.

GEORGE ENG
SUPERVISORY PATENT EXAMINER